Conference and Workshop on Age and Size at Maturity of Chinook Salmon and other Pacific Salmonids (with emphasis on the Columbia River)

Date: May 17-19, 2011

Location: Embassy Suites Portland Airport Hotel, 7900 NE 82nd Avenue, Portland, OR 97220

Purpose: Exchange scientific information and empirical data among fishery scientists, managers, and other interested parties regarding the biological, environmental, and anthropogenic mechanisms affecting age and size at sexual maturity of Pacific salmon, with special emphasis on hatchery and wild populations of Chinook salmon in the Columbia River Basin.

Goals of conference and workshop:

- Establish a common foundation of knowledge regarding time trends for age and size at maturity of Chinook salmon in the Columbia River.
- Establish a common scientific understanding of the biological, environmental, and anthropogenic mechanisms that may affect age and size at maturity of anadromous salmonid fishes.
- Identify management issues and problems related to age and size at maturity of Pacific salmon (e.g., hatchery spawning protocols, run-size forecasts, etc.).
- Identify knowledge gaps and types of data needed to reduce scientific uncertainties related to management needs and comanager goals.
- Identify follow-up tasks to address scientific uncertainties and management needs.

Intended participants: Fish biologists and managers from government agencies and tribes, university scientists, and other parties with a scientific or management interest in the topic.

Scope of Conference:

- May 17 (12:30-5:30 pm): What do the data tell us? Oral presentations by comanager representatives summarizing empirical data for hatchery and natural populations with comprehensive timeline data sets, emphasizing Chinook salmon in the Columbia River.
- May 18 (8am-5:30pm): What does the science tell us? Oral presentations by experts summarizing scientific information on the biological, environmental, and anthropogenic factors that affect age and size at maturity of Pacific salmon.

Scope of Workshop:

• May 19 (Invited participation only; 8am-12:30pm¹): A working meeting among comanagers and presenters to address specific issues and questions in the Columbia River Basin (e.g., broodstock spawning protocols in hatcheries, protocols for passing fish at weirs, etc.).

Registration: \$75/person, includes full lunch buffet on Wednesday, May 18. To register, go to: http://www.fws.gov/columbiariver/comanager_workshop.html.

Hotel reservations: For Embassy Suites Hotel: 503-460-3000. Ask for "US Fish & Wildlife group rate of \$113" before April 26, 2011 (www.embassysuites.com).

¹ This end time may be extended to 3pm if necessary.

Conference and Workshop on Age and Size at Maturity of Chinook Salmon and other Pacific Salmonids

Motivation for conference & workshop: Pacific salmon and steelhead show a wide range of ages and sizes when they return to freshwater as sexually-maturing adults. Many hatchery managers and fishery biologists in the Pacific Northwest have suggested that the mean size of returning adults has decreased in recent years, indicated most notably by increasing proportions of "jacks" among adult fish trapped for hatchery broodstocks.² Several reports in the scientific literature have also suggested that the mean size of Pacific salmon in marine fisheries has decreased relative to historic mean sizes. Many factors have been hypothesized for those reported changes including genetic responses to selection in size-selective fisheries, hatchery practices that promote early

maturation, decadal changes in marine trophic conditions, and inter-annual variations in smolt-to-adult return rates (SARs) that yield large proportions of jacks in some years. These issues, questions, and uncertainties warrant a comanager workshop where a common understanding of the available empirical information and existing scientific literature can be established among managers and scientists as a foundation for managing these fishery resources.



Follow-up scientific symposium: The Annual Meeting of the American Fisheries Society will be held in Seattle, Washington, September 4-8, 2011. Participants in the comanager workshop are also organizing a scientific symposium on the same topic for the Annual Meeting in Seattle. Results and conclusions from the comanager workshop will be presented at the Seattle meeting to a national and international audience.

For additional information contact:

Don Campton (Program Convener) U.S. Fish & Wildlife Service Don Campton@fws.gov 503-231-2386 Doug Olson (Arrangements Chair) U.S. Fish & Wildlife Service doug_olson@fws.gov 360-604-2537





A cooperative project with the Oregon Chapter of the American Fisheries Society

² "Jacks" are small, sexually mature males that, in general, are one year younger and substantially smaller than the earliest-maturing females and other mature males in a population.